

# Distributed (Remote) Monitoring w/ 9volt

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07.15.2017

[github.com/9corp/9volt](https://github.com/9corp/9volt)

# What's 9volt?

- A modern, distributed, remote monitoring system written in Go
  - Single binary, tiny resource footprint (<8MB mem idle)
- Uses an etcd backend for everything (config, state, leader election, event logging)
  - Ie. Event driven config reload (ie. no **manual** config reloads)
- Think "modern alternative to Nagios"
- Used in production in multiple data centers and @InVisionApp

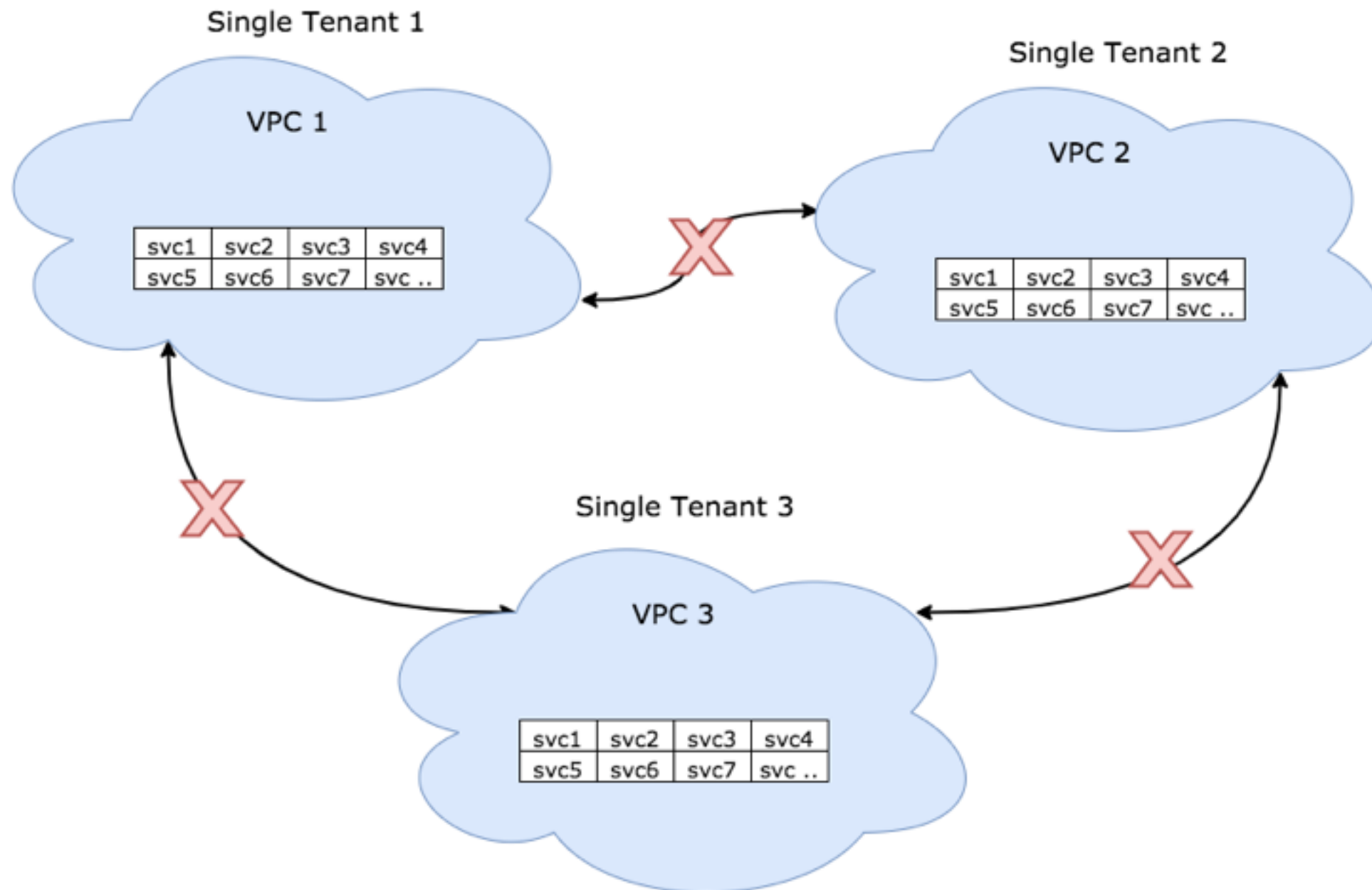
# Why 9volt?

- Incredibly simple to achieve **extremely** large scale
  - Creating a cluster is as simple as launching multiple instances of 9volt and pointing it at the same etcd cluster
- Extremely simple interface for writing new check and alerter types
  - Built-in checks: HTTP, TCP, DNS, Exec
  - Built-in alerters: Slack, Pagerduty, Email
- Automatic check (re)distribution
  - On check addition/removal
  - On member join/leaves
- Ability to set check affinity to a specific group of 9volt instances
  - ie. *I want this check to run only on 9volt instances tagged as "us-east-1"*

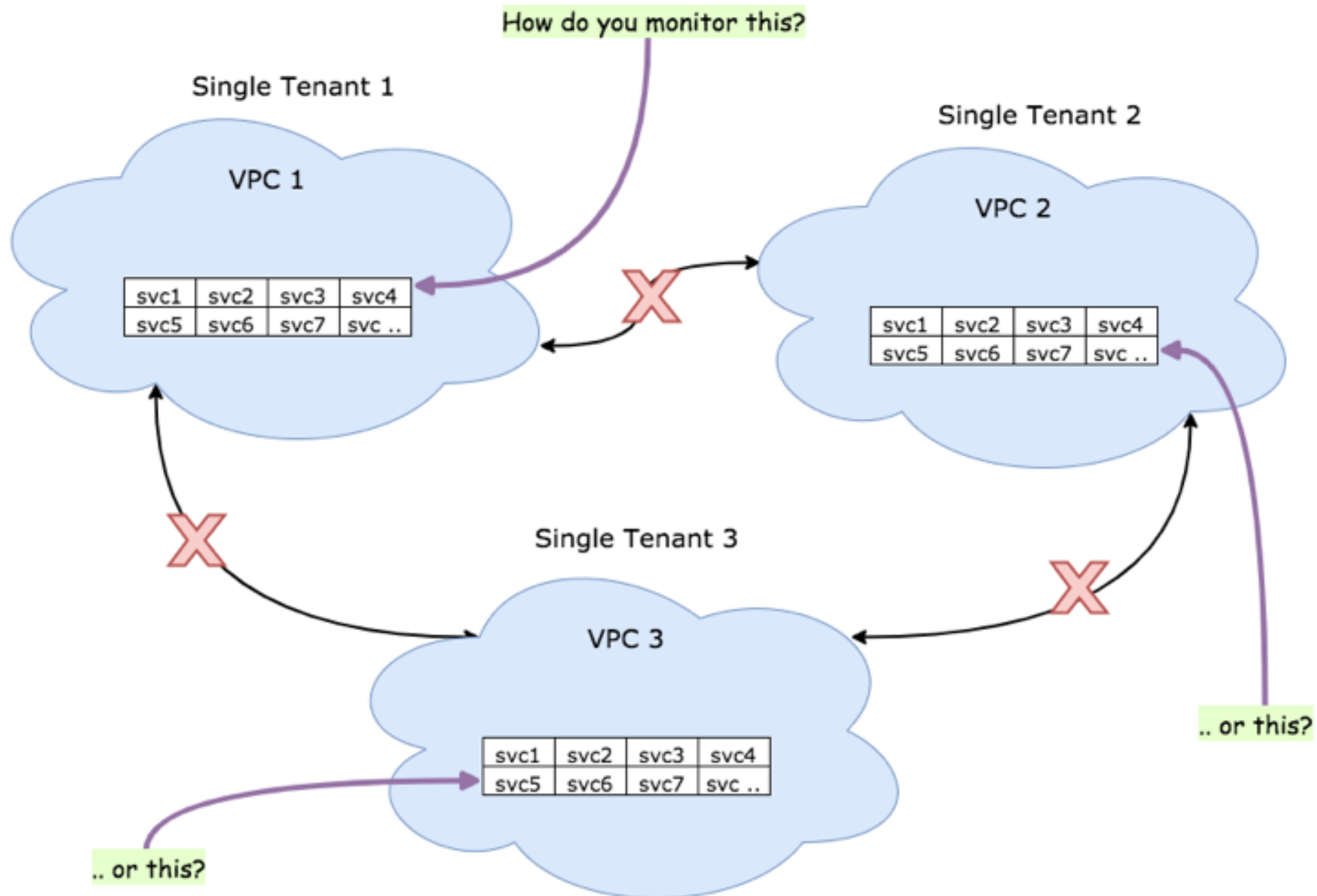
# Another monitoring system?

- 9volt != agent based monitoring
  - Focus on blackbox testing - ie. "Are you alive?" VS metrics based monitoring and alerting
- A good monitoring story is usually complex; let's focus on simplicity
  - Simple, out of the box clustering support
  - Simple deployment story
  - Simple (hopefully non-existent) management
- But most importantly
  - Easy to integrate into an existing deployment pipeline to create JIT monitoring and alerting configs

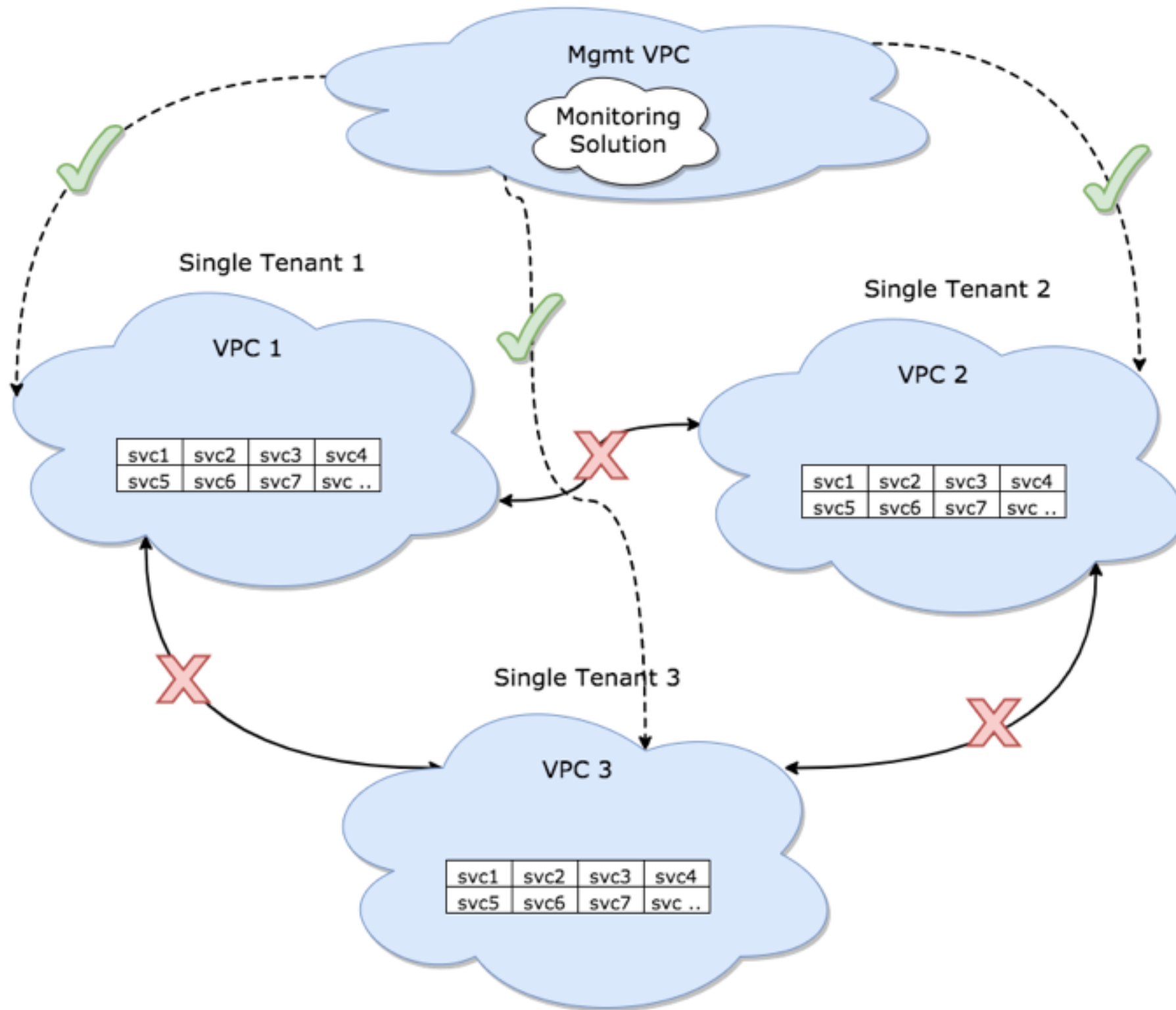
# Weird Problem Scenario



# Problem :(



# You could try...

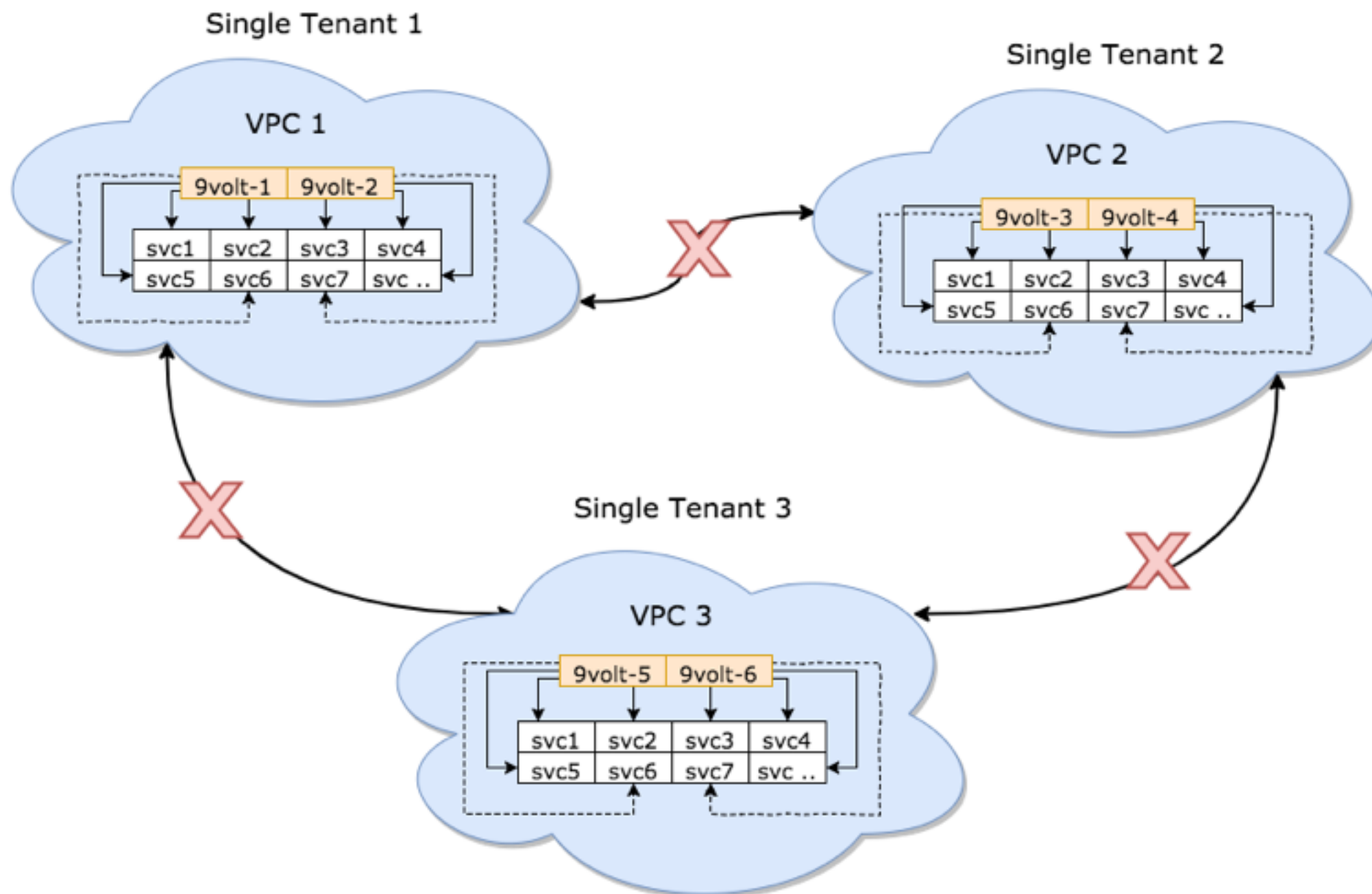


# But.. this could be difficult

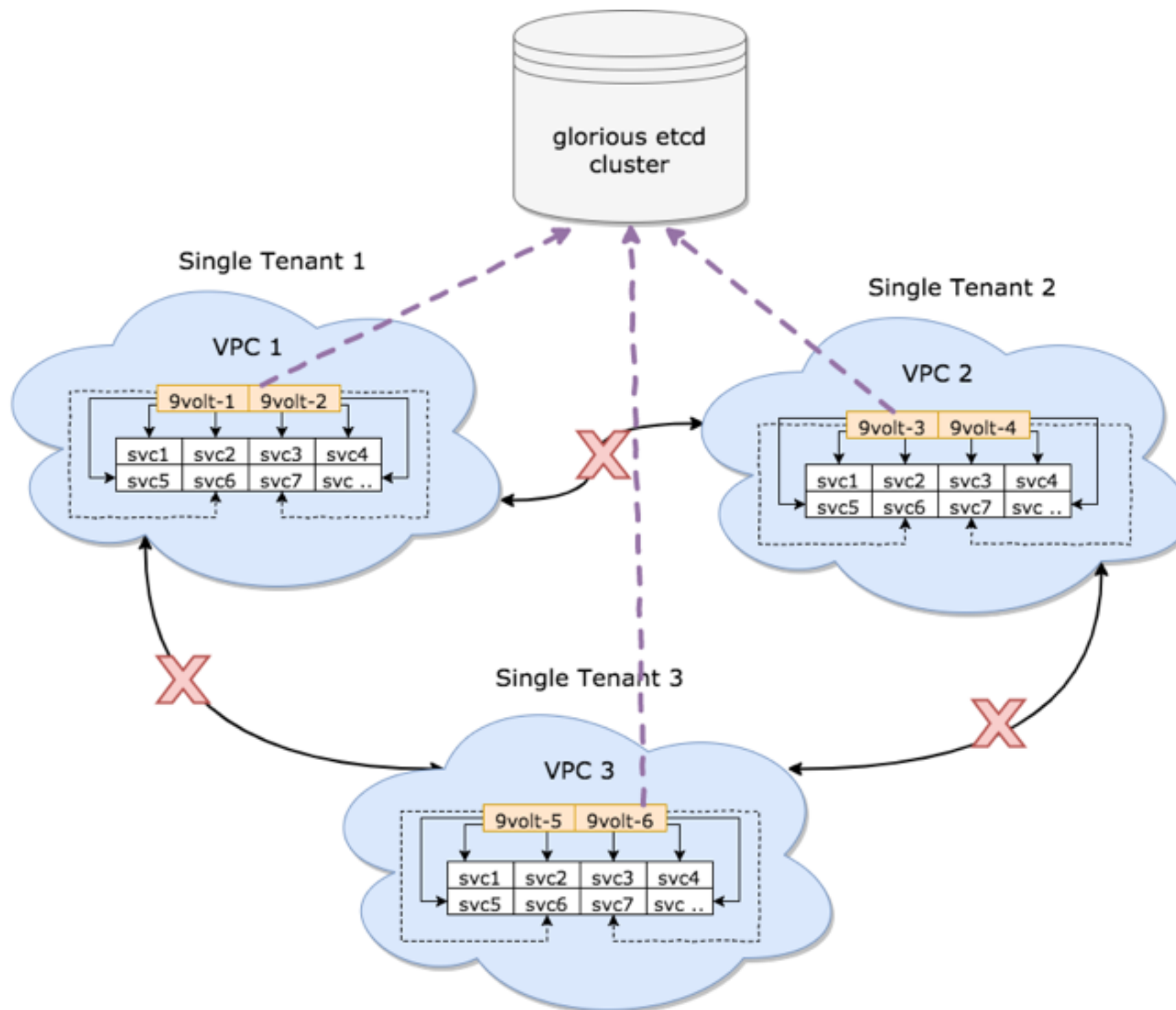
- Legacy network setup
  - Subnet collisions
  - Poor/unpredictable DNS practices
- Legal/contractual obligation issues?



# Possible 9volt Setup



# Possible 9volt Setup Pt. 2



# Super Ultra Mega Cluster



# Thanks for listening!

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